BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2018-2-E

April 19, 2018

IN RE:

Annual Review of Base Rates for Fuel Costs for South Carolina Electric & Gas Company	))))))	**SOUTH CAROLINA OFFICE OF REGULATORY STAFF PROPOSED ORDER APPROVING FUEL COSTS AND REJECTING SOUTH CAROLINA ELECTRIC & GAS COMPANY'S POSITION ON AVOIDED COSTS**

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of the fuel purchasing practices and policies of South Carolina Electric & Gas Company ("SCE&G" or "Company") and for a determination as to whether any adjustment in the fuel cost recovery factors is necessary and reasonable. The procedure followed by the Commission in this proceeding is set forth in S.C. Code Ann. § 58-27-865 (2015). Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental and avoided costs incurred by the Company to implement the Distributed Energy Resource ("DER") program previously approved by the Commission. The period under review in this Docket is January 1, 2017, through December 31, 2017 ("Review Period").

A. Notice and Interventions

By letter dated October 4, 2017, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation in the area affected by the Commission's annual review of the Company's fuel purchasing practices and policies by January 5, 2018. The letter also instructed the Company to furnish the Notice to its customers by U.S. Mail, or by electronic mail to customers who have agreed to receive notice by electronic mail, by January 5, 2018. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On December 5, 2017, the Company filed with the Commission affidavits demonstrating that the Notice was duly published in accordance with the instructions set forth in the Clerk's Office October 4, 2017 letter. On December 15, 2017, the Company filed with the Commission an affidavit demonstrating that the Notice was appropriately furnished to each affected customer.

Petitions to intervene were received from the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("SCCCL"), the Southern Alliance for Clean Energy ("SACE"), the South Carolina Solar Business Alliance, LLC ("SCSBA"), Southern Current, LLC ("Southern Current"), CMC Steel South Carolina ("CMC Steel"), Wal-Mart Stores, East, LP and Sam's East, Incorporated ("Wal-Mart"), and Solbright Energy Solutions ("Solbright"). The petitions to intervene of SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, Wal-Mart, and Solbright were not opposed by SCE&G and no other parties sought to intervene in this proceeding. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015). Wal-Mart and Solbright subsequently withdrew from the proceeding.

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

S.C. Code Ann. § 58-27-865(B) (2015) states in pertinent part that, "[u]pon conducting public hearings in accordance with law, the [C]ommission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the [C]ommission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period."

III. HEARING

Pursuant to S.C. Code § 58-27-865 (2015), the Commission convened a hearing on this matter on April 10, 2018, with the Honorable Swain E. Whitfield presiding. SCE&G was represented by K. Chad Burgess, Esquire; Matthew W. Gissendanner, Esquire; and Benjamin Mustian, Esquire. SCEUC was represented by Scott Elliott, Esquire. SCCCL and SACE were represented by Katie Ottenweller, Esquire. SCSBA was represented by Richard L. Whitt, Esquire and Benjamin L. Snowden, Esquire. Southern Current was represented by Richard L. Whitt, Esquire. CMC Steel and its counsel of record were excused from attending and did not appear at the hearing. Andrew M. Bateman, Esquire and Jenny Pittman, Esquire represented ORS. In this Order, ORS, SCEUC, SCCCL, SACE, SCSBA, Southern Current, CMC Steel, and SCE&G are collectively referred to as the "Parties" or sometimes individually as a "Party."

At the outset of the hearing, the Commission voted on and denied SBA's Petition for Reconsideration of its Motion to Bifurcate Issues. SBA requested that the issues of SCE&G's update to the PR-2 Rate and to the methodology used to determine Avoided Capacity Costs be handled separately, at a later date. The Commission held that this proceeding was an appropriate venue for these issues.

Through their personal appearances, SCE&G presented the direct testimonies and exhibits of George A. Lippard, III; Henry E. Delk, Jr.; Michael D. Shinn; J. Darrin Kahl; Allen W. Rooks;

John H. Raftery; and Joseph M. Lynch. Through their personal appearances, ORS presented the direct testimonies and exhibits of Sarah W. Johnson, Brian Horii, Gaby Smith, and Michael Seaman-Huynh.[1] Through their personal appearances, SCCCL and SACE presented the direct testimony and exhibits of Devi Glick, and SCSBA presented the direct testimony and exhibits of Ben Johnson. Southern Current, SCEUC, and CMC Steel did not present witnesses at the hearing.

In response to the direct testimony of ORS Witness Seaman-Huynh, SCE&G presented the rebuttal testimony of Witness Rooks. In response to the direct testimonies of ORS Witness Horii, SACE and CCL Witness Glick, and SCSBA Witness Johnson, SCE&G filed rebuttal testimony and exhibits of Witness Lynch. ORS Witness Horii, SACE and CCL Witness Glick, and SCSBA Witness Johnson filed surrebuttal and exhibits testimony in response to Witness Lynch's rebuttal.

A. Avoided Costs, Rate Schedule PR-2, and Rate Schedule PR-1

SCE&G Testimony

Witness Lynch testified regarding the Company's calculations of avoided costs for power purchases under PURPA. Following the methodology approved by the Commission in Order No. 2016-297, Witness Lynch testified SCE&G uses a difference in revenue requirements ("DRR") methodology to calculate its avoided energy and avoided capacity costs. This approach involves calculating the revenue requirements between a base case and a change case. The base case is defined by SCE&G's existing fleet of generators and the hourly load profile to be supplied by these generators. The change case is the same as the base case except that the hourly loads are

[1] Prior to the hearing and without objection from the remaining parties, the Commission granted SCE&G and ORS permission to utilize panels for the presentation of witnesses. SCE&G Witnesses Lippard and Delk were presented in the first panel for the Company; Witnesses Shinn and Kahl were presented in the second panel; and Witnesses Rooks, Raftery and Lynch were presented in the third panel. ORS Witnesses Johnson and Horii were taken out of order to accommodate Witness Horii's travel arrangements, and ORS Witnesses Smith and Seaman-Huynh were presented as the final panel.

reduced by 100 megawatts ("MW") in each hour which is the maximum reduction required by regulation under the Public Utility Regulatory Policy Act of 1978 ("PURPA"). The avoided costs are then calculated by taking the difference in revenue requirements between the two cases.

Witness Lynch testified that short-run avoided energy costs in the PR-1 Rate are calculated for the period May 2018 through April 2019 and long-run avoided costs in the PR-2 Rate are calculated for calendar years 2018-2032, the time period appropriate for SCE&G's 2018 Integrated Resource Plan ("IRP") planning horizon pursuant to S.C. Code Ann. § 58-37-40. These 15 years are divided into three groups of 5 years each: 2018 to 2022, 2023 to 2027, and 2028 to 2032. Witness Lynch testified that under SCE&G's current reserve margin policy,[2] it needs resource reserves of at least 14% of the summer peak demand to serve reliably during peak times and at least 12% during the remaining periods, with summer being May through October. For winter, November through April, Witness Lynch testified that SCE&G needs a minimum of 21% of its projected winter peak demand to serve reliably during winter peak periods and at least 14% during remaining periods. SCE&G proposed separate rates for solar and non-solar QFs in its PR-1 Rate and proposed to limit the availability of its PR-2 Rate only to solar Qualifying Facilities ("QFs"). Additionally, SCE&G proposed to update its PR-2 Rate going forward only on an "as needed" basis instead of twice a year as SCE&G feels it is more appropriate to update when the Company's long run avoided costs change significantly.

Witness Lynch testified that these changes are needed in order to pay each type of QF the correct avoided costs. SCE&G performed a study titled "Avoided Energy Cost Methods Study for

[2] Witness Lynch testified that it is SCE&G's intention to file the current resource plan with the Company's 2018 IRP, however he stressed that the resource plan is only a plan and as such is subject to change. See Lynch Direct Page 7, Line 3.

Solar QFs[3]" ("Method Study") which demonstrates that if SCE&G does not distinguish its pricing between solar and non-solar QFs, then the amount SCE&G and its customers would be paying for solar energy would be more than the Company's actual avoided costs, contrary to PURPA's intent.

The Method Study compared the traditional round-the-clock methodology and the solar methodology using the PROSYM model to estimate the difference in revenue requirements between the base case and three different change cases: using the round-the-clock 100 MW purchase; using a power purchase from a 100 MW South Carolina solar profile; and using a North Carolina solar profile to help determine the impact on avoided costs based on a different solar profile. Under the traditional round-the-clock methodology, the change case is derived from the base case by subtracting 100 MWs from every hour of the base case load profile. Avoided energy costs are then collected into four time periods composed of two seasons – peak season and off-peak season – and two daily periods – peak hours and off-peak hours. June through September is the peak season. The peak hours for the peak season are 10:00 a.m. through 10:00 p.m. The peak hours for the off-peak season are 6:00 a.m. through 10:00 a.m. and 5:00 p.m. through 10:00 p.m., except during the months of May and October when they revert to the peak hours defined for the peak season. This method yields four avoided energy costs, one for each time period. With the solar methodology, the change case is derived from the base case by subtracting a 100 MW solar profile from the base case. Since the solar distribution of energy is captured in the solar profile, avoided energy costs are not collected into separate time periods but simply added over all hours. The results from the Method Study show that using the round-the-clock profile to develop the change case results in over-estimating the avoided energy costs by $4.85 per MWH. Witness

[3] Witness Lynch referenced this Method Study in his direct testimony as Exhibit JML-3, Hearing Exhibit 5.

Lynch testified that as more solar is added to the system, the value of each additional increment of solar is reduced. Witness Lynch provided the following table, identified as Table 4 on Page 13 in his direct testimony, to reflect SCE&G's avoided energy costs for the PR-2 Rate:

Solar QF Avoided Energy Costs ($/kWh)

Time Period	Annual
2018-2022	$0.02853
2023-2027	$0.02994
2028-2032	$0.03414

Witness Lynch testified that SCE&G takes a similar approach in developing avoided capacity costs related to the PR-2 Rate as it does with avoided energy costs. Using the methodology detailed above, Witness Lynch testified that SCE&G's avoided capacity costs of solar reflected in the PR-2 Rate is zero. Given the amount of solar generation that is currently projected to interconnect to SCE&G's system, according to Witness Lynch, adding additional blocks of 100 MW solar generation does not affect SCE&G's future capacity needs. SCE&G performed a study, "On Calculating the Capacity Benefit of Solar QFs" ("Solar Capacity Benefit Study") which was attached to Witness Lynch's direct testimony as Exhibit JML-4. The Solar Capacity Benefit Study shows that on more than 80% of the days during the winter months, October through March, solar has no effect on SCE&G's daily peak demand. Since SCE&G's Reserve Margin Study shows that SCE&G needs as much capacity in the winter as it does in the summer, a resource has to provide capacity in the winter as well as the summer in order to avoid the need for capacity and have capacity value. Witness Lynch testified that because solar does not provide capacity during the winter, SCE&G is unable to avoid any of its projected future capacity needs therefore the avoided

capacity cost of solar for the winter months is zero. Witness Lynch testified that SCE&G plans to negotiate contracts with any non-solar QFs that do not fall under the PR-1 rate.

With the PR-1 Rate, Witness Lynch testified that SCE&G proposes to have separate rates for solar QFs and non-solar QFs in order to pay each type of QF the correct avoided costs, as discussed above and in the Methods Study. Avoided energy costs are computed the same for solar QFs on PR-1 as on PR-2, just over a different time period. SCE&G previously defined "critical peak hour" periods and used the number of hours in these periods to convert the annual capacity cost from $ per kW-year to $ per kWh, however Witness Lynch testified that going forward SCE&G proposes to eliminate the critical peak hours as a way to credit QFs for their capacity value. Witness Lynch gave three reasons to support this change: it is more appropriate to add an avoided capacity credit to the avoided energy cost to deliver the capacity value to a solar QF; the addition of so much solar on SCE&G's system shifts the previously experienced effective peak hour; and as reflected in the Reserve Margin Study, SCE&G determined that during the summer months, May through October, the resource reserves needed during peak demand times is at least 14%, with at least 12% needed during the remaining periods and during the winter months, November through April, SCE&G needs at least 21% of its projected winter peak demand during the peak times and at least 14% during the remaining period. Witness Lynch testified that SCE&G's need for capacity spans the entire year, so it is necessary to spread avoided capacity costs throughout the year. The resulting avoided energy costs for the PR-1 Rate are shown in the table below:

PR-1 Rate: Avoided Energy Cost

Non-Solar QFs ($/kilowatt-hour ("kWh"))

Time Period	PSPH	PSOH	OSPH	OSOH
May-April	$0.03233	$0.02886	$0.03445	$0.03298

Solar QFs ($/kilowatt-hour ("kWh"))

TIME PERIOD	Year Round
May – April	$0.03256

Witness Lynch testified that the avoided capacity cost for solar QFs subject to the PR-1 Rate is zero. As explained with the PR-2 Rate, Witness Lynch testified that incremental solar QFs do not affect the resource plan and therefore avoid no future cost.

ORS Testimony

Witness Horii testified that ORS reviewed SCE&G's avoided cost calculations in order to verify the Company is using the avoided cost methodology approved by the Commission, to confirm the methodology meets PURPA requirements, and to verify the avoided cost rates requested by SCE&G in this docket are a reasonable result of the approved avoided cost methodology. Witness Horii testified that the Company's updates in avoided energy costs are a reasonable and consistent result of the methodology used by SCE&G and that the method used is appropriate. The DRR methodology that SCE&G uses supports various input models, including SCE&G's previous method of calculating avoided energy costs by modeling a QF with a constant 100 MW generation profile for the change case, and SCE&G's proposed method of modeling a QF with a solar profile for the change case. Witness Horii testified that the switch to the solar

profile is appropriate, and actually an improvement as SCE&G asserted that the vast majority of recent and future QF resources are solar. Witness Horii testified that in addition to the change in methodology addressed above, the change in SCE&G's supply side resources had a slight change to the avoided energy cost calculation. Witness Horii testified that the cancellation of the construction of the new nuclear units had a slight effect on SCE&G's avoided energy cost calculation; the units were included in SCE&G's 2017 IRP with supply purchases from the new units starting in 2020 and 2021. SCE&G's 2018 IRP the capacity shortfall created by these cancelled units was made up by increased solar and baseload combined-cycle gas plants. Witness Horii testified that he reviewed the fuel price forecasts used to calculate the avoided energy cost for both 2017 and 2018, and he found them to be consistent and similar.

Regarding avoided capacity costs, Witness Horii testified that SCE&G made a dramatic change in approach by not providing any avoided capacity cost calculations in this proceeding. SCE&G provided no information to allow calculation of a non-solar PR-2 capacity. Witness Horii disagreed with SCE&G's position that new solar projects would provide no capacity value. Witness Horii testified that SCE&G has not demonstrated that winter capacity needs are the same or greater than summer capacity needs. Witness Horii testified that SCE&G previously stated in its 2017 IRP that its capacity needs are driven by the summer season, which would mean that incremental solar would continue to provide capacity benefits, therefore incremental solar should continue to receive avoided capacity cost compensation in the PR-1 and PR-2 rate. Witness Horii testified that SCE&G has not provided a straightforward update to its avoided capacity cost estimates, but rather introduced a new concept of 100% winter capacity constraints. Witness Horii expressed concern that the Parties did not have an adequate opportunity to evaluate the accuracy of the winter capacity constraint. SCE&G asserts the position that there are no avoided capacity

costs for fifteen (15) years if there are no winter capacity reductions, to which Witness Horii testified that this position requires that the winter capacity constraint be almost indisputable – however, SCE&G has not proven that position therefore it should not be adopted.

Witness Horii testified that the Reserve Margin Study is flawed, which resulted in SCE&G overestimating the amount of excess capacity needed in the winter. Witness Horii testified that the approach SCE&G used in the Reserve Margin Study is not an industry standard approach[4], and overstates the winter season peak demand variation, thus overstating the need for reserve margin in the winter. Witness Horii testified that he used SCE&G's data to calculate the reserve margin calculations and reached the conclusion that the amount of extra capacity required in the winter compared to the summer is only 211 MW and not 328 MW as SCE&G asserted. This change, Witness Horii explained, reduced the gap between the winter and summer reserve margins from 7% to 5%. Witness Horii testified that with this lower winter reserve margin used in SCE&G's IRP, summer capacity needs will exceed winter capacity needs in some years, therefore resulting in avoided capacity value for solar, which is a summer-focused resource. Witness Horii testified that the load forecasts in the load and resource table[5] appear to be higher than any reasonable expectation of average peak and deviate more in the winter than the summer, which introduces a bias toward making winter the constrained capacity season. Witness Horii testified that when the load forecasts are corrected, summer becomes the constraining season in nine (9) of the fifteen (15) forecast years, a 50% increase from what SCE&G asserted. Witness Horii testified that other changes may be necessary, beyond what he has suggested, and the the difference in summer versus

[4] As compared to the Loss of Load Probability method that Witness Horii testified SCE&G used in its 2012 Reserve Margin Study.
[5] See Witness Lynch Direct Testimony Exhibit JML-1, Hearing Exhibit 5.

winter capacity needs has not been sufficiently analyzed. Witness Horii testified that the use of a zero avoided capacity cost for solar projects is not appropriate, and is a substantial change from the methodology previously used by SCE&G to calculate PR-1 and PR-2 Rates. Witness Horii testified that due to this large change and uncertainty over the accuracy of this change, SCE&G's position of zero avoided capacity costs should be rejected. As such, Witness Horii recommended that either the PR-2 capacity value be set at 19.5%[6] of the avoided cost of per kW from a 100 MW change to SCE&G's base resource plan that excludes any non-committed future resources and reflects any planned plant retirements of firm capacity; or that SCE&G be ordered to provide an estimate of the long-run avoided capacity cost and the calculation for the long-run avoided capacity costs, as they failed to do so in this Docket; or that the current capacity value be maintained for both PR-1 and PR-2 until a justified capacity value can be provided in the next rate update.

SCCCL, SACE, & SBA Testimony

Witness Glick testified on behalf of SACE and CCL. In accordance with ORS's position, Witness Glick testified that SCE&G failed to follow Commission-approved methodology for calculating the avoided capacity cost for solar QFs, which resulted in eliminating the avoided capacity payment. Witness Glick testified that the winter reserve margin SCE&G used was very high, which resulted in unreasonably low avoided cost payment rates in the PR-1 and PR-2 Rates. Witness Glick further testified that the errors SCE&G made in calculating avoided costs for QFs under PURPA, appear to be in conflict with PURPA. In accordance with ORS Witness Horii's recommendations, Witness Glick testified that SCE&G should be ordered to recalculate the avoided capacity cost, and file revised PR-1 and PR-2 tariffs. Witness Glick also recommended

[6] Witness Horii's recommendation of using 19.5% of the avoided capacity value is based on SCE&G's solar analysis that found that a 100 MW increment of new solar would reduce summer peak demand by about 19.5 MW.

that SCE&G be required to complete a reserve margin study prior to the publication of the 2019 IRP, while recalculating the avoided cost of solar QFs based on a resource plan completed with 2017's 14% reserve margin.

Testifying on behalf of SBA, Dr. Johnson recommended that SCE&G's arguments for paying solar generators less than non-solar generators should be rejected, and that all QFs should be paid the full amount of avoided energy and capacity costs. Dr. Johnson testified that the differences in payments to different generators should be based upon the hours when they operate, paying less for hours when demand is low and more when demand is high. Dr. Johnson testified that limiting the availability of the PR-2 Rate only to solar QFs and offering separate rates for solar and non-solar QFs in the PR-1 Rate is inappropriate and will yield several negative effects. Such effects include creating barriers in competition between the two categories of generation, regulatory uncertainty, and discouraging significant investments in non-solar technologies that would fall under the PR-2 Rate. In accordance with ORS recommendations, Dr. Johnson testified that the Commission should reject the zero value for avoided capacity cost and eliminate standard offer rates for non-solar QFs that should qualify for PR-2.[7] Dr. Johnson testified SCE&G should work with ORS and other interested parties to develop higher, more accurate QF rates.

SCE&G Rebuttal Testimony

Witness Lynch testified in rebuttal that SCE&G is not implementing a change in its methodology, that there is just a change in the result – the zero avoided capacity cost. Witness Lynch testified that this result is to be expected due to the Law of Diminishing Marginal Returns – the more and more a product is added, the more the value of subsequent additions decreases.

[7] Witness Johnson also recommended that the Commission reject SCE&G's proposal to reduce energy rates, remove time-related price signals, and base rates on a sub-optimal "Base" expansion plan.

Witness Lynch testified that due to the MW of solar currently under contract, solar has reached this zero point for capacity. Witness Lynch testified that SCE&G has adequately demonstrated that winter capacity needs are the same or greater than summer capacity needs, which is based on the summer and peak demand forecast offset by existing demand side management ("DSM"), existing signed Power Purchase Agreements ("PPAs") with solar QFs, and existing generating capacity. Witness Lynch testified that there are no flaws or inconsistencies in the Reserve Margin Study and that Witness Horii had the necessary data to complete his analysis. Witness Lynch testified that there is no bias towards a greater winter peak forecast and that can be verified by comparing growth projections for each season and customers' energy consumption. The growth rate for summer peak projections for 2018 through 2032 is 1.14% and the winter growth rate is 0.83%. Customers have been more conservative with their energy usage, which affects the summer peak demand but due to the energy consumed by heating strips largely driving the winter peak, the winter peak will not be greatly affected by conservation.

In response to Witness Horii's testimony that SCE&G did not use an industry standard approach, Witness Lynch testified that SCE&G has never used a Loss of Load Probability method to determine an appropriate reserve margin. SCE&G believes that the Loss of Load Probability method does not adequately address the summer and winter peak demand risk, but the Company previously used a component methodology for at least 20 years. Witness Lynch further testified that in recent IRP's, SCE&G has reported the results of its Loss of Load Probability solely for the purpose of providing additional support to its 14% summer reserve margin. Witness Lynch testified that SCE&G did not overly estimate the winter variability due to the use of heat strips and space heaters which supports an upward curving load in the winter. Witness Lynch further testified that Witness Horii miscalculated the maximum possible winter peak demand by using a January

peak as opposed to a February peak, history shows that maximum winter demand can occur in January and in February. By utilizing the February peak, the result is a higher maximum load, which is higher than the January load therefore it is more appropriate to use a February peak to calculate the winter demand. Witness Lynch testified that by using February instead of January, as Witness Horii did, the result is a total deviation of 470 MWs.

As to avoided capacity cost, Witness Lynch testified that SCE&G did provide a capacity cost – and that cost is zero. Witness Lynch reiterated that incremental solar QF purchases do not change the resource plan, therefore the capacity cost is zero. Witness Lynch testified that adding a capacity payment to PR-1 and PR-2 when there are no associated avoided capacity costs would cause customers to ultimately pay more for purchased power than PURPA intends. Witness Lynch testified that there is no need for a published tariff for non-solar QFs greater than 100 kW as there are no non-solar QFs currently seeking a PPA. Should a non-solar QF seek to entire into a PPA, SCE&G will negotiate a contract with that party. Witness Lynch testified that in the future, if a substantial number of non-solar QFs seek to interconnect, then SCE&G would consider creating and publishing a tariff.

ORS Surrebuttal Testimony

Witness Horii testified in response to Witness Lynch regarding SCE&G's forecast need for winter capacity and a flaw with the Reserve Margin Study. Witness Horii testified that he was unable to verify Witness Lynch's analysis in his rebuttal testimony due to not receiving the data until the day before his Surrebuttal Testimony was due to be filed, which was insufficient time to conduct a review. Witness Horii reiterated that SCE&G has failed to provide specific evidence to the claim that SCE&G has reached the "zero point for capacity" regarding solar. SCE&G has not established that solar provides no capacity value. Regarding the flawed Reserve Margin Study,

Witness Horii testified that the temperature variables used in the regression equations differ from those used in the corresponding graph,[8] and it is not possible to recreate the graph using the data provided by SCE&G in Witness Lynch's Exhibit JML-2[9]. SCE&G's data in this exhibit appears to be the Heating Degree Hour temperature metric, or hdh, but it actually is a transformed variable that is related to hdh but is not heating degree hours. Due to this variation, Witness Horii testified that he was unable to accurately evaluate SCE&G's Reserve Margin Study.

Witness Horii testified that he disagreed with SCE&G's claim that comparing summer and winter growth rates is a way to show that there is no bias towards a larger winter peak forecast due to the fact that the first year (2018) in SCE&G's forecast is biased to reduce the gap between summer and winter peak demand, and any growth rates applied to the incorrect first year values would continue the bias throughout the forecast. Witness Horii testified that SCE&G's assertions regarding heat pumps and space heaters does not change his view on the winter peak demand but reinforces it. There are two types of heating response relationships that affect winter peak data, on moderate days heat pumps operate in the efficient range but on colder days, the heat strips and additional heating sources are used, so the rise in peak demand with colder temperatures is greater. Witness Horii testified that this strengthened his argument that all winter days should not be used in the regression modeling. Witness Horii testified that the difference in the winter reserve margin due to this correction, when paired with other corrections to SCE&G's approach, rejects SCE&G's position that solar provides no capacity value.

[8] See Witness Lynch's Direct Testimony Exhibit JML-2, Hearing Exhibit 5.
[9] Witness Horii learned of the data inconsistency via telephone conversation with SCE&G two days prior to the deadline for filing ORS testimony.

Witness Horii testified that the use of February as the peak month instead of January does not actually affect his estimate of winter demand side risk. As to whether SCE&G's calculation of the average peak using a mix of months as opposed to using the same month for calculating all peak values, Witness Horii testified that more information and time to conduct an analysis is needed to determine whether SCE&G's adjustment to Witness Horii's demand side risk is correct. Witness Horii testified that SCE&G's position that his winter deviation should have been higher does not change his position, it would only change the number of years during which summer would be a binding capacity constraint but not the fact that there will be some years where summer capacity would be the driver of capacity need. Witness Horii pointed out that this is a complex issue that deserves more scrutiny.

Witness Horii testified that Witness Lynch's rebuttal testimony that SCE&G's peak demand forecasting is reasonable based on a comparison to historical forecasts and actual peaks raises even more doubt over the forecasts SCE&G has used in its 2018 IRP. Over the past four (4) years, SCE&G forecast average winter growth of 36.25 MW per year, the highest growth during that time was 106 MW between 2014 and 2015. However, in the 2018 IRP, SCE&G forecasts a gross territorial peak of 5024 MW for winter 2018 – which is 388 MW higher than the forecast for winter 2017 and 256 MW higher than the actual 2017 winter peak. Witness Horii testified that Witness Lynch's testimony that PJM has a 16% summer reserve margin and a 27% winter reserve margin is misleading because it implies that it is appropriate for SCE&G to have a higher winter planning reserve margin than summer. However, PJM does not have a higher planning reserve margin in the winter, Witness Horii testified that SCE&G failed to point out that these numbers are not comparable to reserve margin, despite their descriptions. The 27% is actually a Winter Weekly Reserve Target and it is used to determine when units can go down for

maintenance outages in the winter. The 16% is the summer Installed Reserve Margin, which is equivalent to the planning reserve margins at issue in this Docket. Witness Horii testified that PJM is currently evaluating winter IRM, but the study has not yet been completed.

Regarding SCE&G's methodology to determine reserve margin, Witness Horii reiterated that Loss of Load Probability, or related Expected Unserved Energy, are commonly accepted methodologies. Witness Horii testified that he was unfamiliar with the component method being used elsewhere. A large change in the treatment for valuing PR-2 capacity should not be based on the component method, but should only be considered after the seasonal capacity question is evaluated using industry standard methods.

Witness Horii testified that Witness Lynch's testimony that winter capacity need is greater than summer capacity need in all years of the planning horizon consistent with the 2018 IRP load and resources forecast provided in Exhibit JML-1 is incorrect. In Witness Lynch's rebuttal testimony SCE&G used estimates of winter DSM reductions after 2020 that are 100 MW lower than the values presented in SCE&G's 2018 IRP, but provided no reason for this inconsistency. Witness Horii testified that even if there were a reason for the inconsistency, it would only strengthen his concerns over the zero capacity for PR-2. Witness Horii testified that in his IRP-based reconstructions, even more years would be designated as summer peaking, in contrast to SCE&G's assertion that the winter capacity need is greater in all of the years of the planning horizon.

Witness Horii testified that his recommendations remained the same after reviewing Witness Lynch's rebuttal. Witness Horii recommends that SCE&G's position that avoided capacity cost should be set at $0.00 should be rejected; that the PR-2 capacity value be set at 19.5% of the avoided cost per kW from a 100 MW change to SCE&G's base resource plan that excludes

any non-committed future resources and reflects any planned plant retirements of firm capacity; SCE&G be required to provide an estimate of long-run avoided capacity cost and the calculation for the long-run avoided capacity costs; or in the alternative, require the current capacity value be maintained for both PR-1 and PR-2 until a better capacity value can be provided in the next rate update.

Intervenor Surrebuttal Testimony

In response to SCE&G Witness Lynch's rebuttal, Witness Glick testified that SCE&G's choice and adequacy of its reserve margin methodology has not been supported by the Company and reiterated that SCE&G should hire an independent firm to analyze and determine an appropriate reserve margin for both winter and summer. Witness Glick testified that it is not reasonable for SCE&G to develop its future resource plan based on the premise that it now has a winter peaking system. While the SCE&G system was winter peaking in 2017, it is not reasonable to say that will be the case going forward. Witness Glick testified to reduce the inefficient heating appliances that Witness Lynch asserts cause the high demand side risk, SCE&G should utilize targeted demand-side thermal efficiency measures to reduce the risk. In response to Witness Lynch's rebuttal testimony that adding a capacity payment when there are no associated avoided costs would raise customer costs, Witness Glick testified that while that statement is correct, SCE&G has failed to adequately demonstrate that there are no avoided capacity costs associated with solar QFs over the long-run.

Dr. Johnson testified on behalf of SBA in response to Witness Lynch's rebuttal. Dr. Johnson testified in agreement with Witness Horii, that despite the volume of material exchanged in preparation for the hearing there was not an adequate opportunity to fully review and analyze the issues in this Docket. In response to Witness Lynch asserting that Dr. Johnson's testimony

was merely a repeat from the 2017 proceeding, Dr. Johnson testified that some of his arguments were made in the 2017 docket, but SCE&G's circumstances this year, such as the cancelation of the nuclear construction and the proposed changes to the tariffs, are such that some similar arguments need to be addressed again[10].

Based upon the evidence of record, and after reviewing the testimonies of the parties of record, the Commission finds and concludes that SCE&G properly calculated its avoided energy under PURPA using the methodology approved by the Commission in Order No. 2016-297. The Commission finds and concludes that the use of the DRR methodology is reasonable and appropriate. The Commission also finds and concludes that SCE&G's use of a solar profile for determining avoided energy costs for solar QFs is reasonable and appropriate. The Commission finds and concludes that SCE&G failed to establish its avoided capacity costs using the methodology approved by the Commission in Order No. 2016-297. The Commission finds and concludes that breaking the PR-1 Rate into solar and non-solar is reasonable as to avoided energy costs, but the Commission finds that the PR-1 Rate is not reasonable regarding avoided capacity costs. The Commission finds and concludes that the PR-2 Rate as applied to solar is reasonable as to avoided energy costs, but the Commission finds that the PR-2 Rate is not reasonable regarding avoided capacity costs. Additionally, the Commission finds that the lack of a PR-2 Rate for non-solar QFs and utilizing negotiated contracts as needed instead is not appropriate. The Commission finds and concludes that there are errors in SCE&G's Reserve Margin calculations, as outlined in ORS Witness Horii's Direct and Surrebuttal Testimonies.

[10] Witness Glick responded in similar fashion to Witness Lynch's rebuttal regarding her repetitive testimony.

Therefore, the Commission rejects SCE&G's position that avoided capacity cost should be set at $0.00 and orders that SCE&G maintain the 2017 avoided capacity cost. The Commission also orders SCE&G to provide an estimate of long-run avoided capacity costs and the calculation for the long-run avoided capacity costs by May 31, 2018. The Commission further orders that SCE&G provide updates to the PR-1 and PR-2 Rates using the updated capacity costs.

NEM Distributed Energy Resources Methodology

1. SCE&G Testimony

Witness Lynch testified that, by way of its Order No. 2015-194 issued in Docket No. 2014-246-E, the Commission approved the following eleven (11) components of value for NEM Distributed Energy Resources:

Net Energy Metering Methodology
1. +/- Avoided Energy
2. +/-Energy Losses/Line Losses
3. +/- Avoided Capacity
4. +/- Ancillary Services
5. +/- T&D Capacity
6. +/- Avoided Criteria Pollutants
7. +/- Avoided CO_2 Emission Cost
8. +/- Fuel Hedge
9. +/-Utility Integration & Interconnection Costs
10. +/- Utility Administration Costs
11. +/- Environmental Costs

= Total Value of NEM Distributed Energy Resources

Witness Lynch testified regarding SCE&G's updates to these components as evidence by the table below[11]:

[11] See Table 10 on Page 27 of Witness Lynch's Corrected Direct Testimony

	Current Period	IRP Planning Horizon (15-Year Levelized)	Components
1	$0.03070	$0.03010	Avoided Energy Costs
2	$0	$0.00	Avoided Capacity Costs
3	$0	$0	Ancillary Services
4	$0	$0	T & D Capacity
5	$0.00008	$0.00008	Avoided Criteria Pollutants
6	$0	$0	Avoided CO_2 Emission Cost
7	$0	$0	Fuel Hedge
8	$0	$0	Utility Integration & Interconnection Costs
9	$0	$0	Utility Administration Costs
10	$0	$0	Environmental Costs
11	$0.03078	$0.03018	Subtotal
12	$0.00251	$0.00246	Line Losses @ 0.9245
13	$0.03329	$0.03264	**Total Value of NEM Distributed Energy Resources**

He also testified that, in Docket No. 2017-2-E, the Company calculated the value for these components and, in Order No. 2017-246, the Commission determined that those values complied with the NEM Methodology approved by the Commission in Order No. 2015- 194. Witness Lynch testified that the Company updated these components of value by calculating the current value and one for the value over the IRP planning horizon. Witness Lynch further provided information on SCE&G's evaluation of each component and its estimate of the associated value. Witness Rooks also sponsored the Company's proposed "Rider to Retail Rates – Net Energy Metering for Renewable Energy Facilities" tariff sheet which updates the total value of NEM Distributed

Energy Resources to reflect the components of value for NEM Distributed Energy Resources enumerated by Witness Lynch.[12]

2. ORS Testimony

Witness Horii testified that the significant changes to SCE&G's total value of NEM Distributed Energy Resources were in the Avoided Energy Costs and Avoided Capacity Costs line items. Witness Horii testified that the PURPA avoided energy cost decreased from last year, which lead to a reduction in the NEM Distributed Energy Resources avoided energy cost. Witness Horii testified that due to SCE&G claiming a zero value for PURPA avoided capacity cost, SCE&G provided a zero value for the corresponding NEM Distributed Energy Resources avoided capacity cost. As for the other components with zero values, Witness Horii testified that SCE&G's justification was reasonable and SCE&G is following the methodology approved by the Commission in Order No. 2015-194. Aside from the Avoided Capacity Cost component, Witness Horii found that SCE&G's Value of NEM Distributed Energy Resources components are conservative but appropriate. As discussed previously, Witness Horii testified that the Avoided Capacity Cost values are inappropriate, therefore the Total Value of NEM Distributed Energy Resources would be impacted due to the recommended rejection of the zero value.

SCCCL, SACE, and SBA Testimony

As with ORS Witness Horii, Witness Glick testified that the errors regarding avoided costs also carry over to the NEM methodology and application that SCE&G used, which resulted in errors in the component valuations. Witness Glick specifically highlights SCE&G's avoided energy and avoided capacity costs, avoided transmission and distribution capacity value, avoided

[12] See Witness Rooks Direct Testimony at 16-17; See also Exhibit AWR-14, Hearing Exhibit No. 5

environmental costs and line losses.[13] Witness Glick recommended that SCE&G apply the recalculated avoided capacity cost as discussed above to the NEM components[14].

Based upon the evidence of record, and after reviewing the testimony of the parties of record, the Commission finds that SCE&G properly evaluated the components of value, with one exception, for NEM Distributed Energy Resources. Therefore, the Commission orders that SCE&G provide an updated table to reflect the correction to the Avoided Capacity Costs as detailed herein.

C. DER Programs and Costs

SCE&G Testimony

Witness Raftery discussed the performance of the Company's DER programs during the Review Period, and the costs associated with offering these DER programs during the Review Period. These programs include offering utility-scale DER programs, customer-scale NEM incentives, Performance Based Incentives, BCA program, and the Company's Community Solar program. Witness Raftery also discussed the Company's DER cost projections for the forecast period January 1, 2018, through April 30, 2019.

As a result of these efforts, the balance of DER program costs at the end of the Review Period totaled an over-recovery of $1,504,690 in avoided costs and an under-recovery of $798,039 in incremental costs. For the period January 1, 2018, through April 30, 2019, the Company projects that DER program costs will include $9,304,269 in avoided costs and $25,313,951 in incremental costs. Witness Rooks provided actual data on the Company's DER avoided and incremental costs

[13] Witness Glick's testimony supports ORS's position regarding avoided capacity costs, however Witness Horii testified that transmission and distribution capacity cannot be adequately addressed at this time and SCE&G's valuations for the remaining NEM components were proper.

[14] Additionally, Witness Glick testified that SCE&G should correct its methodologies and calculations for avoided energy, avoided T&D capacity, avoided line losses, and avoided environmental cost value.

for the historical Review Period and the projected DER costs for the period January 1, 2018, through April 30, 2019. Witness Rooks also sponsored the Company's proposed "Adjustment for Fuel, Variable Environmental & Avoided Capacity, and Distributed Energy Resource Program Costs" tariff.

Witness Raftery testified regarding the updates to SCE&G's Community Solar Program. By Order No. 2016-707, this Commission approved the Credit Rate Agreement between SCE&G and Clean Energy Collective, LLC (CEC). Per this agreement CEC is authorized to develop, build, and market up to 16 MW of community solar renewable generating facilities; the individual solar panels in these facilities are available for purchase or subscription by SCE&G customers. Witness Raftery testified that currently CEC is constructing three facilities: Springfield Solar, a 6 MW facility in Orangeburg County; Nimitz Solar, an 8 MW facility in Jasper County; and Curie Solar, a 2 MW facility in Hampton County. Witness Raftery testified that as of February 15, 2018, a total of 15.536 MW of solar from these three facilities has either been purchased or subscribed to, with the remaining 0.474 MW of capacity reserved for low-income customers.

Witness Raftery further testified that SCE&G met the 1% utility-scale goals as of December 31, 2017, with the construction and interconnection of nine (9) solar farms totaling 48.16 MW to SCE&G's distribution system as part of the Company's DER program. He stated that, as of December 31, 2017, SCE&G had 6,161 customers (6,021 residential and 140 non-residential) participating in its customer-scale DER programs. This customer participation represented approximately 56.81 MW of solar generating capacity on SCE&G's system. Witness Raftery testified that SCE&G has met the 1% goal for customer-scale facilities under Act 236.

Witness Raftery testified that SCE&G is planning to move forward with the additional utility-scale investment, pursuant to S.C. Code Ann. § 58-39-130(D)(2015). As of February 18,

2018, SCE&G has 718 MW in signed PPAs in utility-scale DER and PURPA QFs. Witness Raftery testified that due to this high penetration, SCE&G plans to issue RFPs for solar photovoltaic systems coupled with battery energy storage. Additionally, Witness Raftery testified that SCE&G is working on plans for a solar farm at the Lake Murray Training Center at the Saluda Hydro Generating Station.

Witness Raftery also testified that, based on overall NEM adoption levels experienced since July 1, 2016, SCE&G forecasts that it will meet Act 236's net metering limit or cap of 2% in April or May of 2019. As of December 31, 2017, the total cumulative NEM generating capacity provided by the 6,308 net metering customer-generator facilities on SCE&G's system was approximately 48.03 MW, or approximately 1.14% of the Company's 6 previous five-year average peak demand of 4,225 MW.

ORS Testimony

ORS Witness Johnson testified that the Company's calculations regarding the DERP charges are in compliance with Act No. 236 of 2014 and Commission Orders, and that the Company's calculations support SCE&G's proposed DER program charges. Witness Johnson testified that ORS found SCE&G's DERP avoided and incremental costs to be reasonably and prudently incurred, and that SCE&G has met the Customer Scale and Utility Scale goals of Act 236. She further testified that the Company's calculation of the NEM Incentive is consistent with the Settlement Agreement in Docket No. 2014-246-E and the methodology approved in Commission Order No. 2015-194.

The Commission finds that the evidence presented by SCE&G establishes that, during the Review Period, SCE&G offered DER programs and took appropriate steps to fulfill its DER goals approved by the Commission in Order No. 2015-194. The Commission further finds that the

Company's DER programs and the associated costs are reasonable and prudent and are designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130.

E. Fuel Purchasing Practices, Environmental Costs, Plant Operations, and Fuel Inventory Management

SCE&G Testimony

SCE&G witnesses testified on issues related to the prudency of SCE&G's fuel purchasing practices, plant operations, and fuel inventory management, and explained the regulatory atmosphere governing environmental compliance for SCE&G. Witness Lippard discussed the operating performance of the V.C. Summer Nuclear Station. Witness Delk reviewed the operating performance of the Company's fossil/hydro units and of South Carolina Generating Company's Williams Electric Generating Station. Witness Shinn discussed the Company's procurement and delivery activities for coal and No. 2 fuel oil for electric generation, the changes that have occurred in coal markets since the last annual fuel adjustment hearing, and how these changes affected coal procurement during the Review Period and are anticipated to affect future procurement. Witness Shinn also discussed the procurement and delivery of limestone for the wet scrubbers at Wateree and Williams Stations, the nuclear fuel purchasing processes for SCE&G generation, uranium prices, and the near-term outlook of coal and uranium prices. Witness Kahl provided testimony about the natural gas purchasing processes for SCE&G generation and discussed natural gas prices as well as the near-term outlook. Witness Rooks provided actual fuel cost data for the Review Period, and projected fuel costs for the period January 1, 2018, through April 30, 2019; and recommended fuel rates for the period of May 2018 through April 2019.

ORS Testimony

Witness Smith's direct testimony presented the results of the ORS Audit Department's examination of the Company's books and records pertaining to the Fuel Adjustment Clause operation for the Review Period, and the Company's estimated calculations for the months of January 2018 through April 2018. Based on the ORS Audit Department's examination of the Company's books and records, and the Company's operation of the fuel cost recovery mechanism, Witness Smith verified that the Company's books and records accurately reflect the fuel costs incurred by the Company in accordance with previous Commission orders and with S.C. Code Ann. § 58-27-865 (2015). Witness Smith testified that SCE&G made an over-recovery adjustment of $113,739,272 to offset base fuel costs with a gain form interest rate swaps.[15] Witness Seaman-Huynh's direct testimony presented the ORS's findings resulting from its review of the Company's fuel expenses and power plant operations used in the generation of electricity during the Review Period. Based on ORS's review of the Company's operation of its generating facilities during the Review Period, Witness Seaman-Huynh verified that the Company made reasonable efforts to maximize unit availability and minimize fuel costs during the Review Period. Witness Seaman-Huynh also testified that ORS did not find that SCE&G made any adjustments to its Environmental Capacity Components during the Actual Period attributed to the IRS Section 174 deduction claims[16].

As reflected in the evidence of record, no party challenged the reasonableness or prudency of SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period. Based upon the evidence and testimony of the

[15] See Witness Smith's Direct Testimony Exhibit GS-5, Hearing Exhibit 14
[16] Witness Rooks testified in rebuttal that SCE&G that any adjustment for IRS Section 174 will be addressed in the Joint Petition filed by SCE&G and Dominion Energy on January 12, 2018.

witnesses the Commission therefore finds and concludes that SCE&G's fuel purchasing practices and policies, environmental costs, plant operations, and fuel inventory management during the Review Period are reasonable and prudent.

F. Proposed Base Fuel Component

SCE&G Testimony

Witness Rooks testified that the actual base fuel under-collected balance was $2,355,695 at December 31, 2017, and the projected over-collected balance to be $50,536,981 at the end of April 2018. Witness Rooks also testified that a Base Fuel Component of 2.457 cents per kWh is projected to recover all base fuel costs in the forecast period in addition to eliminating the projected over-collected balance by the end of April 2019. Witness Rooks testified that there were not any Commission authorized adjustments to base fuel costs during the actual period, but pursuant to SCE&G's February 22, 2018 letter in Docket No. 2013-382-E, and in compliance with Commission Order No. 2013-776, SCE&G plans to apply gains from recently settled interest rate swaps in the amount of $113,739,272 to reduce its base fuel cost under-collection balance.[17]

ORS Testimony

Witness Seaman-Huynh's testified that ORS did not make any adjustments to the fuel factors proposed by SCE&G. Witness Seaman-Huynh testified that ORS reviewed SCE&G's proposal to apply gains from recently settled interest rate swaps to reduce its Base Fuel Component. SCE&G's proposal is in compliance with Commission Order No. 2013-776, therefore Witness Seaman-Huynh testified that ORS supports SCE&G's proposal. Witness Seaman-Huynh testified that if SCE&G's proposed changes are approved, the net effect on the average monthly

[17] This amount is reflected in Line 29 of Witness Rooks' Direct Testimony Exhibit AWR-1, Hearing Exhibit 4.

bill for a residential customer on Rate 8 using 1,000 kWh would be approximately $0.72%, or 0.49%.

As reflected in the evidence of record, no party challenged SCE&G's proposed Base Fuel Component. Based upon the evidence and testimony of the witnesses the Commission therefore finds and concludes that SCE&G's proposed Base Fuel Component is reasonable and prudent and is consistent with S.C. Code Ann. § 58-27-865 (2015).

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

The methodologies used by SCE&G to calculate its avoided energy costs under PURPA as described in the testimony of SCE&G Witness Lynch are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297. However, SCE&G failed to establish the reasonableness and prudency of the methodologies used in calculating its avoided capacity costs.

SCE&G's proposal to break out the PR-1 Rate into solar and non-solar is reasonable as to avoided energy costs, but the PR-1 Rate is not reasonable regarding avoided capacity costs. SCE&G's proposal regarding PR-2 Rate as applied to solar is reasonable as to avoided energy costs, but the PR-2 Rate is not reasonable regarding avoided capacity costs. Additionally, SCE&G's lack of a PR-2 Rate for non-solar QFs is not appropriate.

SCE&G's calculation and method of accounting for DERP avoided and incremental costs to be reasonably and prudently incurred in implementing the Company's DERP, were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

SCE&G properly evaluated all of the components of value for NEM Distributed Energy Resources *except* for Avoided Capacity Costs. Therefore, the Commission orders that SCE&G provide an updated table to reflect the correction to the Avoided Capacity Costs as detailed below.

During the Review Period, SCE&G offered DER programs and took steps to fulfill its DER goals approved by the Commission in Order No. 2015-194, which programs and steps were reasonable and prudent, complied with Commission Order Nos. 2015-194 and 2015-512, and were designed to meet SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

As a result of SCE&G's efforts to provide the DER programs, the over-collected balance of the DER program costs as of December 31, 2017, totaled $1,504,690 in avoided costs and an under-collected balance of $798,039 in incremental costs, which costs are reasonable and prudent.

SCE&G's proposed DER Avoided Cost Components by class are reasonable and prudent. SCE&G's proposed monthly per account DER Incremental Cost Component by class properly allocates SCE&G's DER program incremental costs and are reasonable and prudent.

SCE&G's fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) were reasonable and prudent.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices and policies, plant operations, fuel inventory management, and all other matters associated with S.C. Code Ann. § 58-27-865 (2015) of SCE&G are reasonable and prudent for the period January 1, 2017, through December 31, 2017.

2. The methodologies used by SCE&G to calculate its avoided energy costs under PURPA are reasonable and prudent and consistent with the methodology approved by the Commission in Order No. 2016-297.

3. SCE&G has failed to meet its burden to establish that the methodologies used to calculate its avoided capacity costs under PURPA are consistent with the methodology approved by the Commission in Order No. 2016-297, therefore SCE&G's position that avoided capacity cost should be set at $0.00 is rejected.

4. SCE&G shall provide an estimate of long-run avoided capacity costs and the calculation for the long-run avoided capacity costs by **May 31, 2018**.

5. Rate Schedules PR-1 and PR-2 shall not be implemented for billing in May 2018 until updated avoided capacity costs are provided.

6. SCE&G's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period of January 1, 2017 to December 31, 2017 were reasonable and prudent, were consistent with the methodology approved in Commission in Order No. 2015-194, and complied with S.C. Code Ann. § 58-40-10, *et seq.* (2015).

7. Witness Lynch's Table 10 on Page 27 of his corrected direct testimony needs to be updated when the new avoided capacity cost is available on May 31, 2018. Additionally, the NEM Rider must not be updated until the updated value of NEM is available.

8. SCE&G's DER programs offered during the Review Period of January 1, 2017 to December 31, 2017 were reasonable and prudent, complied with Commission Order Nos. 2015-

194 and 2015-512, and achieved SCE&G's statutorily designated goals as set by S.C. Code Ann. § 58-39-130 (2015).

9. SCE&G's proposed monthly per account DER Incremental Cost Components by class, as set forth below, properly allocate SCE&G's DER program incremental costs and are reasonable and prudent, and are hereby approved for use on, during, and after the first billing cycle in May 2018.

Class	Monthly Per Account DER Incremental Cost Component
Residential	$ 1.00
Small & Medium Gen. Svc.	$ 5.37
Large General Service	$ 100.00

10. The cumulative balances of SCE&G's DER program costs as of December 31, 2017, totaled an over-collected balance of $1,504,690 in avoided costs and an under-collected balance of $798,039 in incremental costs, which are reasonable and prudent.

11. SCE&G reasonably projected its DER program costs for the Period January 1, 2018 through April 30, 2019, which are currently reflected in Exhibit AWR-7 and Exhibit AWR-9 attached to the direct testimony of Allen Rooks.[18]

12. SCE&G's historical fuel costs recovery for the period ending December 2017 are consistent with S.C. Code Ann. § 58-27-865 (2015), only the DER forecasts will be impacted by the recalculation of the avoided capacity costs and will be reviewed in the next fuel proceeding.

13. SCE&G shall set its Base Fuel Component, Environmental Fuel & Avoided Capacity Components, DERP Avoided Cost Components, and Total Fuel Cost Factors consistent

[18] See also Hearing Exhibit 4.

with the amounts set forth in the table below effective for bills rendered on and after the first billing cycle for May 2018.

Class	Base Fuel Component (¢/kWh)	Environmental Fuel & Avoided Capacity Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Total Fuel Costs Factor (¢/kWh)
Residential	2.451	0.083	0.042	2.576
Small General Service	2.451	0.075	0.038	2.564
Medium General Service	2.451	0.063	0.032	2.546
Large General Service	2.451	0.039	0.019	2.509
Lighting	2.451	0.000	0.000	2.451

14. The only tariff approved at this time is the Fuel and Variable Environmental Costs tariff.

15. SCE&G shall provide updated tariffs for the PR-1 and PR-2 Rates, and the NEM Rider to the Commission on May 31, 2018, including the new Value of NEM table.

16. SCE&G shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865(B) (2015).

17. SCE&G shall continue to submit monthly reports of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater to the Commission and ORS as previously required. Other Parties shall also be provided a copy of the monthly reports upon written request.

18. SCE&G shall account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by

booking the difference to revenues with a corresponding deferred debit or credit. ORS shall monitor the cumulative recovery amount.

19. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Swain E. Whitfield, Chairman

ATTEST:

_____, Commissioner

(SEAL)